

## **DATA INPUT DEVICE AND METHOD FOR DETECTING LIFT-OFF FROM A TRACKING SURFACE BY ELECTRICAL IMPEDANCE MEASUREMENT**

### **ABSTRACT**

A data input device comprising an impedance sensor arranged with respect to a tracking surface. The impedance sensor has a measurement zone within which the impedance sensor measures an electrical impedance. A controller of the device receives data from and is responsive to the impedance sensor for determining if the data input device is spatially separated from the tracking surface by at least a lift-off detection distance as a function of a measured impedance. The controller further initiates a non-tracking mode in which the controller suspends tracking of relative movement between the data input device and the tracking surface when the data input device is spatially separated from the tracking surface by at least the lift-off detection distance.